135995

L.S Signed

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION V

and the

#### OHIO ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF:

ALSCO ANACONDA, THE ALSCO

GNADENHUTTEN SITE, a site

belonging to ARCO Chemical Company,)

A Division of Altantic Richfield

Company,

)

PROCEEDING UNDER SECTION 106(a)
OF THE COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION,
AND LIABILITY ACT, 42 U.S.C.
\$9606(a)(1980)

AND

OHIO REVISED CODE SECTIONS 3734.13(A) and 6111.03(H)

U.S. EPA Docket No.

Y-W- '87 -C- 002

ADMINISTRATIVE ORDER BY CONSENT

I. JURISDICTION

A. This ADMINISTRATIVE ORDER BY CONSENT (Consent Order) is issued pursuant to the authority vested in the President of the United States by Section 106(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. \$9606(a), and delegated to the Administrator of the United States Environmental Protection Agency on August 14, 1981, by Executive Order 12316, 46 Federal Register 42237, and duly delegated to the Assistant Administrator for Solid Waste and Emergency Response and the Regional Administrators by Delegation Nos. 14-4, and 14-14-A, the latter of which was signed on April 16, 1984. This Consent Order is also issued pursuant to the authority vested in the Ohio Environmental Protection Agency by Ohio Revised Code \$\$3734.13 and 6111.03.

- B. Respondent agrees to undertake all actions required by the terms and conditions of this Consent Order, and consents to and will not contest U.S. EPA or OEPA jurisdiction regarding this Consent Order or any future judicial or administrative action taken by U.S. EPA or OEPA to enforce this Order.
- Although the Respondent consents to jurisdiction for purposes of this Order, but neither Respondent's consent, nor anything in this document, shall constitute an admission by Respondent of any legal or factual matter set forth herein, all of which matters the Respondent specifically denies. By signing this Order, Respondent does not admit, accept, or intend to acknowledge any liability or fault with respect to the conditions at or arising at the Facility or with respect to any matter arising from the Facility. Furthermore, by signing this Order, Respondent does not waive, for purposes of any proceeding, other than an enforcement proceeding to enforce the terms of this Order, any claim or defense that it might have raised to this Order or that it might raise in any other proceeding brought by OEPA, USEPA or any other person or entity. The Respondent specifically denies the Findings of Fact, Conclusions of Law and Determination set forth herein and expressly reserves the right to challenge them and any legal consequences that may result from them in any proceeding other than in an enforcement proceeding pursuant to this Order.

#### II. STATEMENT OF PURPOSE

In entering into this Consent Order, the objectives of the U.S. EPA, OEPA, and the Respondents are to protect public health and the environment by determining fully the nature and extent of the threat caused by the release or threatened release of hazardous substances, pollutants or contaminants from the Alsco Facility and by evaluating alternatives for the appropriate extent of remedial action to prevent or mitigate the migration of the release or threatened release from the Alsco Facility. that end, this Consent Order provides for a full investigation of the Alsco Facility to determine the extent of any contamination resulting from the Alsco Facility and to develop a program of appropriate response measures under Section 104 of CERCLA which will address all areas of contamination at the Alsco Facility. The activities conducted pursuant to this Consent Order shall employ sound scientific, engineering and construction practices and shall be consistent with the National Contingency Plan (40 CFR Part 300) and any applicable federal, local and state law.

#### III. NOTICE TO THE STATE

Notice of the issuance of this Consent Order has heretofore been given to the State of Ohio, pursuant to the notice requirement of Section 106(a) of CERCLA, 42 U.S.C. §9606(a).

### IV. DEFINITIONS

As used in this Consent Order and the Remedial Investigation/

Feasibility Study (hereinafter "RI/FS") to be incorporated herein, the Statement of Work, attached hereto and fully incorporated herein as Exhibit A, and the RI Work Plan and FS Work Plan to be incorporated herein as Exhibits B and C, (hereinafter collectively referred to as the "Work Plans"), the following terms shall be defined:

- l. "Respondent" shall mean ARCO Chemical Company, a division of Atlantic Richfield Company, its employees, agents, successors, assigns and designated representatives. Notwithstanding the foregoing, this term as it appears in paragraphs XVI(A), XIX, and XXI does not apply to employees, agents and designated representatives of ARCO Chemical Company, a Division of Atlantic Richfield Company, or to the employees, agents, and designated representatives of its successors and assigns.
- 2. "The Contractor" shall mean a qualified Contractor retained by the Respondent pursuant to this Consent Order, and any subcontractor, employee, representative, agent or designee thereof.
- 3. "U.S. EPA" shall mean the United States Environmental Protection Agency, its employees, contractors, subcontractors, and authorized representatives.
- 4. "OEPA" shall mean the Ohio Environmental Protection Agency, its employees, contractors, subcontractors, and authorized representatives.
- 5. "Alsco Anaconda" or "Facility" shall mean the facility, as facility is defined in Section 101(9) of CERCLA,

42 U.S.C. §9601(9), located in Gnadenhutten, Ohio, which is the subject of the RI/FS to be conducted pursuant to this Consent Order.

- 6. "Alsco Plant" shall mean the ARCO Chemical Company manufacturing plant located within the Gnadenhutten city limits, Tuscarawas County, Ohio. The Plant is approximately twenty-five acres, with the central portion of the manufacturing building located at latitude 40°21'40" and longitude 81°26'25". The property is bounded by the Penn-Central Railroad right of way, Walnut Street, and Anaconda Drive on the north, east, and south, respectively, and by the Tuscarawas River on the west.
- 7. "The parties" shall mean the Respondent, U.S. EPA and OEPA.
- 8. "Documents" shall mean any non-privileged correspondence, or narrative reports, and any and all non-privileged documentary evidence, of any kind, reflecting any information concerning Alsco conditions, or the conduct of the RI/FS. The term "document" shall be construed broadly to promote the effective sharing of information and views concerning the RI/FS between the Respondent, U.S. EPA and OEPA.

## V. FINDINGS OF FACT

l. The Alsco Plant is located within the Gnadenhutten city limits, Tuscarawas County, Ohio. The Plant is approximately

twenty-five acres, with the central portion of the manufacturing building located at latitude 40°21'40" and longitude 81°26'25". The property is bounded by the Penn-Central Railroad right-of-way, Walnut Street, and Anaconda Drive on the north, east, and south, respectively, and by the Tuscarawas River on the west.

- 2. The Alsco Plant was established at this site by Harvard Industries in 1948 and was acquired by the Anaconda Company in August, 1971. The Anaconda Company was acquired by the Atlantic Richfield Company in January, 1977. The Respondent owns and operates the Alsco Plant.
- 3. Aluminum siding and coated coil are manufactured at the Plant. Operations include the casting, rolling, extruding, and coil coating of aluminum and some coating of galvanized steel coils.
- 4. Prior to 1972, aluminum pretreatment wastes were commingled with cooling water, routed through a lagoon system to remove settleable solids and discharged directly to the Tuscarawas River. A wastewater treatment system designed to reduce hexavalent chromium was constructed and put into operation in early 1973. The treatment system generated a metallic hydroxide sludge which was removed in an unlined, on-site sedimentation basin. Clarified effluent from the system was discharged to the Tuscarawas River under the provisions of NPDES permit No. OIC-000-14BD. The

existing sedimentation basin was used to settle metallic hydroxides as part of the treatment system. As the basin became filled with wastewater treatment process sludge, a dragline was used to remove the sludge from the basin for disposal in the adjacent sludge pit. In 1978, a clarifier and filter press were installed to mechanically remove metallic hydroxide sludge from the process effluent and this dewatered sludge was hauled offsite for disposal.

- 5. Hazardous substances, as defined in Section 101(14) of CERCLA, have been disposed of at the Facility. The sludge generated in the treatment system resulted from the chemical conversion coating of aluminum and galvanized steel. This sludge is a F019 generic process waste, which in 40 CFR §261.31, is a Resource Conservation and Recovery Act (RCRA) listed hazardous waste. The primary contaminants associated with the waste are chromium and cyanide. Polychlorinated Biphenyls (PCB) have also been identified at the Facility.
- 6. Pursuant to Section 105(8) B of CERCLA, 42 U.S.C. 9605, the Facility was included in the second update to the National Priorities List (NPL) in the Federal Register on June 10, 1986. See 40 CFR Part 300, Appendix B, and 51 Federal Register 21069.
  - 7. A reasonable time for beginning and completing the actions

required by this Consent Order has been provided for, and the Respondent has agreed to undertake the actions requested by U.S. EPA and OEPA in this Consent Order.

#### VI. CONCLUSIONS OF LAW

- 1. Alsco Anaconda Facility is a "facility" as defined in Section 101(9) of CERCLA, 42 U.S.C. §9601(9).
- 2. The Respondent is a "person" as that term is defined in Section 101(21), 42 U.S.C. §9601(21).
- 3. Hazardous substances as defined in Section 101(14) of CERCLA, 42 U.S.C. §9601(14), have been disposed of at the Facility.
- 4. The past, present and/or potential migration of hazardous substances from the Facility constitutes an actual and/or threatened "release" into the environment as that term is defined in Section 101(22) of CERCLA, 42 U.S.C. §9601(22).
- 5. Within the meaning of Section 107(a) of CERCLA, 42 U.S.C. \$9607(a), the Respondent is an "owner and operator" of the Facility.

## VII. <u>DETERMINATIONS</u>

Based on the foregoing Findings of Fact and Conclusions of Law, U.S. EPA and OEPA have made the following determinations:

1. The release or threat of release of hazardous substances, via groundwater contamination and surface water contamination, at the Facility presents or may present an imminent and substantial endangerment to public health or welfare or the environment;

2. The actions to be undertaken pursuant to this Consent Order are appropriate for determining the extent of response authorized by CERCLA and the Ohio Revised Code and are consistent with the National Oil and Hazardous Substance Contingency Plan, 40 CFR Part 300 and with Ohio Revised Code Sections 3734.20 et seq.

## VIII. PARTIES BOUND

A. This Consent Order shall apply to and be binding upon the following parties:

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- 1. ARCO Chemical Company, a Division of Atlantic Richfield Company, its officers, employees, agents, contractors in their capacity as corporation representatives only, its successors, and assigns. Respondent's officers, employees, agents or employees of its contractors shall not be personally responsible for stipulated penalties, reimbursement of response costs or for an indemnification of U.S. EPA and OEPA.
- 2. The United States Environmental Protection Agency (U.S. EPA).
  - 3. The Ohio Environmental Protection Agency (OEPA).
- B. No change in ownership or corporate status relating to the Facility will in any way alter the status of the Respondent under this Order or alter the Respondent's responsibilities under this Order. Despite any such changes in status, the liability of

the Respondent will remain unaffected and the Respondent will remain responsible for carrying out all activities required by this Consent Order.

In the event that Respondent sells the Facility and complies with the requirements of paragraph B(1), (2), and (3), set forth below, the parties hereto agree that the subsequent purchaser shall be permitted to implement the requirements and obligations contained in this Consent Order. Respondent shall continue to remain responsible for all requirements and obligations contained in this Consent Order in the event that the subsequent purchaser fails to carryout all of the requirements and obligations of this Consent Order.

- 1. Respondent shall give notice to the purchaser of this Consent Order and shall present to purchaser a copy of this Consent Order.
- 2. The purchase and sale agreement between Respondent and purchaser shall require the purchaser to acknowledge receipt of this Consent Order and shall also require purchaser to agree to comply with its requirements and obligations.
- 3. Respondent shall notify U.S. EPA and OEPA prior to sale in the event the Facility is sold and shall also provide same with a copy of the purchase and sale agreement. U.S. EPA and OEPA recognize that Respondent may delete certain provisions.

of the purchase and sale agreement which may be commercially sensitive and not pertinent to the carrying out of this Order.

C. Respondent shall provide a copy of this Consent Order to all contractors, sub-contractors, laboratories, and consultants retained to conduct any portion of the work to be performed pursuant to this Consent Order prior to their individual participation on Respondent's behalf and shall ensure that any such contractors, sub-contractors, laboratory and consultants abide by the terms of this Consent Order.

#### IX. REMEDIAL INVESTIGATION AND FEASIBILITY STUDY

- A. Respondent shall complete a Remedial Investigation ("RI") and perform a Feasibility Study ("FS") (together referred to as "RI/FS") of the Facility and the surrounding area in accordance with the Statement of Work attached hereto and incorporated herein as Exhibit A, the Remedial Investigation Work Plan to be attached as Exhibit B, and the Feasibility Study Work Plan to be attached as Exhibit C, and Respondent shall comply with the time schedule as set forth therein.
- B. Within five (5) business days of the effective date of the Consent Order, the Respondent shall retain a consultant(s) qualified to undertake and complete the requirements of the Statement of Work, attached hereto as Exhibit A, if one has not already been retained, and shall notify U.S. EPA and OEPA of the name of that consultant(s).

- C. Within twenty (20) business days of the effective date of this Consent Order, Respondent shall submit to U.S. EPA and OEPA a draft Remedial Investigation Work Plan, (hereafter "RI Work Plan"), in accordance with the standards, specifications and U.S. EPA RI/FS guidance documents identified in Exhibit A.
- 1. The draft RI Work Plan shall be subject to review, modification, approval or disapproval, in whole or in part, by U.S. EPA and OEPA. U.S. EPA and OEPA shall notify Respondent in writing of approval or disapproval or required modifications of the RI Work Plan, or any parts thereof, specifying the deficiencies and any required modifications consistent with Exhibit A.
- 2. Within twenty (20) business days of receipt of U.S. EPA and OEPA notification disapproving or requiring modifications of the RI Work Plan, or any parts thereof, Respondent shall amend and submit to U.S. EPA and OEPA a revised RI Work Plan, correcting the deficiencies and reflecting all the required modifications.

  Failure to submit such a revised RI Work Plan shall be deemed noncompliance with the terms of this Consent Order by Respondent and grounds for termination of this Consent Order by U.S. EPA and OEPA. In the event of such termination, U.S. EPA and OEPA retain all rights provided by federal and state statutes and regulations including, but not limited to, conducting a complete RI/FS, and Respondent retains all rights and defenses provided by law.

- 3. Upon final approval of the RI Work Plan by U.S. EPA and OEPA, the RI Work Plan shall be deemed incorporated into and made a part of this Consent Order, and shall be attached hereto as Exhibit B.
- 4. Promptly upon receipt of final approval by U.S. EPA and OEPA of the RI Work Plan, Respondent shall commence performance of the work as detailed in the RI Work Plan.
- D. Concurrent with submittal of the draft RI Report required by the Statement of Work, the Respondent shall submit a detailed Work Plan for the Feasibility Study, (hereafter "FS Work Plan"), in accordance with the standards, specifications and U.S. EPA RI/FS guidance documents identified in Exhibit A.
- 1. The draft FS Work Plan shall be subject to review, modification, approval or disapproval, in whole or in part, by U.S. EPA and OEPA. U.S. EPA and OEPA shall notify Respondent in writing of approval or disapproval or required modifications of the FS Work Plan, or any parts thereof, specifying the deficiencies and any required modifications consistent with Exhibit A.
- 2. Within twenty (20) business days of receipt of U.S. EPA and OEPA notification disapproving or requiring modifications of the FS Work Plan, or any parts thereof, Respondent shall amend and submit to U.S. EPA and OEPA a revised FS Work Plan, correcting the deficiencies and reflecting all the required modifications.

Failure to submit such a revised FS Work Plan shall be deemed noncompliance with the terms of this Consent Order by Respondent and grounds for termination of this Consent Order by U.S. EPA and OEPA. In the event of such termination, U.S. EPA and OEPA retain all rights provided by federal and state statutes and regulations including, but not limited to, conducting a complete RI/FS, and Respondent retains all rights and defenses provided by law.

- 3. Upon final approval of the FS Work Plan by U.S. EPA and OEPA, the FS Work Plan shall be deemed incorporated into and made a part of this Consent Order, and shall be attached hereto as Exhibit C.
- 4. Promptly upon receipt of final approval by U.S. EPA and OEPA of the FS Work Plan, Respondent shall commence performance of the work as detailed in the FS Work Plan.
- E. U.S. EPA and OEPA may determine that additional tasks, consistent with the National Contingency Plan are necessary as part of a Remedial Investigation and Feasibility Study in addition to U.S. EPA and OEPA approved tasks and deliverables which have been completed pursuant to this Consent Order. Subject to Section XIV of the Consent Order, the Respondent shall implement any additional tasks which U.S. EPA and OEPA determine are necessary as part of a Remedial Investigation and Feasibility Study and which are in addition to the tasks detailed in the RI Work Plan and the FS

Work Plan. The additional work shall be completed in accordance with the standards, specifications, and schedule approved by U.S. EPA and OEPA.

- F. The RI/FS shall be conducted in accordance with the National Contingency Plan, 40 C.F.R. Part 300, Section 300.68(e) through (j), and in accordance with U.S. EPA RI/FS guidance.
- G. Upon submittal to U.S. EPA and OEPA of an approved final Draft Feasibility Study Report, U.S. EPA and OEPA shall make the final Draft Feasibility Study Report available to the public for review and comment for, at a minimum, a twenty-one (21) calendar day period, pursuant to U.S. EPA's Community Relations Policy. Following the public review and comment period, U.S. EPA and OEPA shall notify the Respondent of any necessary modifications to the final Draft Feasibility Study Report.

#### X. PROJECT COORDINATORS

A. Respondent, U.S. EPA and OEPA shall each designate a Project Coordinator, and an Alternate for the purpose of overseeing the implementation of this Consent Order. To the maximum extent possible, except as specifically provided in this Consent Order, communications among Respondent, U.S. EPA and OEPA concerning the terms and conditions of this Consent Order shall be made among the Project Coordinators. Notwithstanding the above,

attorneys for any and all parties shall not contact non-attorney representatives of any party without permission from the applicable party's attorney or unless his or her attorney is present either by phone or in person. During the course of implementation of the Work Plans, the Project Coordinators shall, whenever possible, operate by agreement. The Project Coordinators shall attempt to resolve disputes informally through good faith discussion of the issues.

- B. Within five (5) calendar days of the effective date of this Consent Order, the signatories shall notify each other, in writing, of the name, address and telephone number of the designated Project Coordinator and an Alternate Project Coordinator.
- C. Each Project Coordinator shall be responsible for assuring that all communications received from the other Project Coordinators are appropriately disseminated and processed.
- D. Without limitation upon U.S. EPA's or OEPA's statutory or regulatory authority, the Project Coordinators shall have the authority to: (1) take samples or direct the type, quantity and location of samples to be taken by the Respondent, consistent with the Statement of Work and Work Plans; (2) direct that work consistent with this Consent Order stop whenever a Project Coordinator determines that activities at the Facility may create a present danger to public health or welfare or the environment;

- (3) observe, take photographs and make such other reports on the progress of the work as the Project Coordinator deems appropriate; and (4) review records, files and documents relevant to the Consent Order during normal daylight business hours. The USEPA or OEPA Project Coordinator, or any agent or contractor thereof shall obtain written consent prior to photographing any manufacturing or process equipment.
- E. The U.S. EPA Project Coordinator shall be the On-Scene Coordinator/Remedial Project Manager ("OSC/RPM") as provided in, and shall have the authority vested by, the National Contingency Plan, 40 CFR Part 300. The U.S. EPA OSC/RPM retains all authority to direct or conduct any activity authorized by CERCLA.
- F. Either the Project Coordinator for Respondent or the Alternate Project Coordinator for Respondent shall be on-site during all hours of site work and shall be on call for the pendency of this Consent Order.

## XI. PROGRESS REPORTS

A. Respondent shall provide to U.S. EPA and OEPA monthly written progress reports containing a full description of the progress achieved during that period toward the compliance with this Consent Order. Respondent shall also set forth as part of

these reports, such actions which are scheduled for next month.

At a minimum, these reports shall:

- 1. Identify the Facility and activity;
- Describe status of work at the Facility and progress to date;
- 3. Demonstrate the percentage of completion;
- 4. Describe difficulties encountered during the reporting period;
- 5. Describe actions being taken to rectify problems;
- 6. Describe activities planned for the next month; and
- 7. Identify changes in personnel.

The monthly progress reports will list target and actual completion dates for each element of activity, including the project completion, and provide an explanation of any deviation from the milestones in the Work Plan schedules. These progress reports are to be submitted to U.S. EPA and OEPA by the twentieth day of every month following the effective date of this Consent Order.

- B. Documents, including progress reports and approvals, to be submitted to the Parties shall be sent by certified mail, return receipt requested, to the following addresses or to such other address as the Parties hereafter may designate in writing:
- 1. Those documents to be submitted to U.S. EPA should be sent in duplicate to:

Director, Waste Management Division U.S. EPA, Region V, 5HE-12 230 South Dearborn Street Chicago, Illinois 60604 Attn: Pauline LeBlanc

2. Those documents to be submitted to the Ohio EPA should be sent to:

Ohio Environmental Protection Agency Division of Solid and Hazardous Waste Management Southeast District Office 2195 Front Street Logan, Ohio 43138 Attn: Michael Starkey

and

Ohio EPA
Superfund and Remedial Investigation Unit
Division of Solid and Hazardous Waste Management
361 F. Broad Street
Columbus, Ohio 43216-1049
Attn: Mark Besel

3. Those documents to be sent to Respondent should be sent to:

Richard L. Sloan
Manager Special Projects
ARCO Chemical Company
3801 West Chester Pike
Newtown Square, Pennsylvania 19073

and

V. Peter Wynne, Esq. Atlantic Richfield Co. Legal Division 1500 Market Street Philadelphia, PA 19101

C. If the date for submission of any item or notification required by this Consent Order falls upon a weekend or state or federal holiday, the time period for submission of that item or notification is extended to the next working day following the weekend or holiday.

## XII. SAMPLING, SITE ACCESS AND DATA/DOCUMENT AVAILABILITY

- A. U.S. EPA, OEPA and the Respondent shall make available to each other the results of sampling, tests or other data generated by any of them, or on their behalf, with respect to the implementation of this Consent Order.
- B. At the request of U.S. EPA or OEPA, the Respondent shall allow split or duplicate samples to be taken by the U.S. EPA or OEPA of samples collected by the Respondent during the implementation of the Consent Order. The Respondent shall notify U.S. EPA and OEPA Project Coordinators not less than ten (10) business days in advance of any sample collection activity.
- C. To the extent that portions of the Facility are presently owned by parties other than those bound by this Consent Order, Respondent will use its best efforts to obtain voluntary site access agreements from the present owners including any agreements necessary to provide access to U.S. EPA, OEPA and their authorized representatives. Such agreements, if obtained, will be submitted to U.S. EPA and OEPA.
- D. The Respondent shall assure that U.S. EPA, OEPA and/or any of their authorized representatives shall have access to enter all property at the Facility at all reasonable times for purposes consistent with this Order, CERCLA, and Ohio Revised Code Sections 3734.20 and 6111.05 including, but not limited to,

inspecting records, operating logs and contracts related to the Facility; reviewing the progress of the Respondent in carrying out the terms of this Consent Order; conducting such tests as U.S. EPA, OEPA or their Project Coordinators deem necessary; verifying the data submitted to U.S. EPA or OEPA by the Respondent; taking any action consistent with 40 CFR Part 300. The Respondent shall permit such representatives to inspect and request copies of all records, files, photographs, documents, and other writings, including all sampling and monitoring data, which pertain to this Consent Order. All parties with access to the Facility pursuant to this paragraph shall comply with all federal, state and local rules and regulations pertaining to health and safety plans. Furthermore, all parties shall comply with all reasonable ARCO Chemical Company plant safety and health procedures which shall be furnished to USEPA and OEPA.

- E. The parties agree that their activities as well as the activities of the contractor shall be conducted in such a way as not to unreasonably interfere with the conduct of the plant's business, and that wherever feasible five (5) business days notice shall be given to the Respondent prior to conducting activities on its property.
- F. The Respondent also agrees that it shall preserve, during the pendency of this Consent Order and for a minimum of six (6) years after its termination, all records and documents in its

possession or in the possession of its divisions, employees, agents, accountants, contractors or attorneys which relate to the history of the use of the Facility for waste disposal, generation of materials at the Alsco Plant, and to any actions performed at this Facility under this Consent Order despite any document retention policy to the contrary. Retention during the period specified shall not waive attorney client privilege. After the six (6) year period, Respondent shall notify U.S. EPA and OEPA within 30 calendar days prior to the destruction of any such documents required to be kept pursuant to this paragraph. Upon request by U.S. EPA or OEPA, Respondent shall make available to U.S. EPA or OEPA such documents or copies thereof not previously provided, unless otherwise privileged under law.

#### XIII. REVIEW OF DOCUMENTS

A. Respondent shall submit all documents required by the Statement of Work and the Work Plans to U.S. EPA and OEPA pursuant to the criteria and schedules set forth in the Statement of Work and the Work Plans. Respondent shall submit copies of all raw data and copies of all original reports of analytical procedures and results to U.S EPA and OEPA within ten (10) business days after Respondent receives such raw data and reports from each laboratory involved in the analyses of any samples collected at or near the Facility.

Respondent may submit to U.S. EPA and OEPA any interpretive reports and written explanations concerning such raw data and

original laboratory reports. Such interpretive reports or explanations must be submitted with the original laboratory reports and raw data.

U.S. EPA and OEPA shall review each document within thirty (30) business days of receipt and advise Respondent in writing as to whether the document is approved or disapproved in whole or in part. Complex documents such as the Quality Assurance Project Plan and Feasibility Study may require a longer review period, in which case, U.S. EPA and/or OEPA shall notify Respondent of that fact within thirty (30) business days of receipt of the document. Documents which are submitted in sections or which form the basis for a more extensive final required submittal shall be reviewed when the completed or final document is submitted to U.S. EPA and OEPA. In the event Respondent is notified that a document is disapproved in whole or in part, U.S. EPA and OEPA shall include a statement in the notification as to the modifications or additions which must be made to the document prior to approval, and an explanation as to why such modifications or additions are necessary. Within twenty (20) business days of receipt of U.S. EPA and OEPA notification requiring modifications or additions, or some greater time period that the parties may mutually agree upon, Respondent shall amend and submit to U.S. EPA and OEPA a revised document, correcting the deficiencies and reflecting all of the required modifications or additions. In the event such modifications or additions delay the time schedule set forth in the Statement of

Work and the Work Plans, said schedule shall be adjusted accordingly upon agreement of the parties, and such delay shall not be considered a violation of this Order. Delays in performance of the Work Plan due to U.S. EPA or OEPA document review time shall not be considered a violation of this Order. The period for performance of activities contingent on completion of U.S. EPA or OEPA document review shall be extended upon agreement of the parties, for a time not to exceed the actual delay occasioned by the U.S. EPA or OEPA review.

- C. In the event of subsequent disapproval, U.S. EPA retains the right to amend such reports, to perform additional studies, and to conduct a complete Remedial Investigation and Feasibility Study pursuant to its authority under CERCLA.
- D. If Respondent does not object to the modifications or additions made pursuant to paragraph B of this Section, if any, proposed by U.S. EPA or OEPA, Respondent shall expeditiously undertake and complete such measures in accordance with the proposed schedule of completion. If Respondent objects to any proposed modifications or additions, it shall, within twenty (20) days after receiving written notice of those modifications or additions, initiate the dispute resolution procedure set forth in Section XIV of this Consent Order. Delays in performance of any proposed modifications or additions which occur as a result of the dispute

resolution procedure shall not be considered a violation of this Order.

E. All notices required pursuant to this Order shall be deemed to have been made upon receipt of a certified letter delivered to the persons specified in paragraph XI(B). Documents including reports, approvals and other correspondence, to be submitted pursuant to this Order, shall be sent by certified mail to the addresses set forth in paragraph XI(B), or to such other addresses as the Respondent, U.S. EPA or OEPA hereafter may designate in writing.

#### XIV. DISPUTE RESOLUTION

A. The parties shall use their best efforts to informally and in good faith resolve all disputes or differences of opinion. If, however, disputes arise concerning this Consent Order including, but not limited to, implementation of the Work Plans, approval of documents, scheduling of any of the work, selection, performance, or any other obligation assumed hereunder, which the parties are unable to resolve informally, either the Respondent shall present a written notice of such dispute to U.S. EPA and OEPA, or U.S. EPA and OEPA shall present a written notice of such dispute to the Respondent, which shall set forth the specific points of dispute, the position of the party presenting such notice and the technical basis therefor, and any actions which that party considers necessary.

Within ten (10) business days of receipt of such written notice, the recipient shall provide a written response to the giver of the notice setting forth the position of the recipient and the basis for the position of the recipient.

- B. Within fifteen (15) business days of receipt of a written response, if U.S. EPA and OEPA concur with the position of the Respondent, this Consent Order will be modified to include any necessary extensions of time or variances of work. Within said fifteen (15) business days, if U.S. EPA and OEPA do not concur with the position of the Respondent, the Respondent will be notified in writing and U.S. EPA and OEPA will resolve the dispute, based upon, and consistent with, the agreement of the parties herein and Respondent will be so notified in writing of the decision.
- C. During the pendency of dispute resolution procedures set forth in this Section, the time period for completion of work and/or obligations to be performed under this Consent Order, which are affected by such dispute, shall be extended for a period of time not to exceed the actual time taken to resolve the dispute. Elements of the Work Plans and/or obligations not affected by the dispute shall be completed in accordance with the schedule contained in Exhibit A and the Work Plans.
- D. Upon resolution of any dispute, the Respondent shall immediately incorporate the resolution into the appropriate plan

or procedures, and proceed with the Work Plans according to the amended plan or procedures.

## XV. CONFIDENTIAL INFORMATION

The Respondent may assert a claim of business confidentiality covering the information requested by this Consent Order, except for analytical data, pursuant to 40 CFR §2.203(b) and Ohio Administrative Code Section 3745-49-03(A). Information which U.S. EPA determines to be confidential will be afforded the protection specified in 40 CFR Part 2, Subpart B, and if determined confidential by Ohio EPA, afforded protection under Ohio Administrative Code Rule 3745-49-03. If no such claim accompanies the information when it is submitted to U.S. EPA and OEPA, it may be made available to the public by U.S. EPA or the OEPA without further notice to the Respondent.

#### XVI. DELAY IN PERFORMANCE: STIPULATED PENALTIES

A. Except with respect to any extensions agreed to by the parties and except for delays contemplated by paragraphs XVI(c) and XIV herein, Respondent shall be liable for payment into the Hazardous Substances Response Trust Fund administered by U.S. EPA the sums set forth below as stipulated penalties for each week or part thereof that Respondent fails to submit a required report or document or comply with a schedule in accordance with the requirements contained in this Consent Order. Such sums shall be due and payable within forty-five (45) calendar days of receipt

of notification from U.S. EPA assessing the penalties. These stipulated penalties shall accrue in the amount of \$500.00 for the first week or part thereof and \$1,000.00 for each week or part thereof thereafter. Any stipulated penalty accrued for failure to meet an interim schedule date shall be forgiven in the event that Respondent meets the final schedule date for completion of the RI and FS Work Plans as set forth in Exhibit A and in the Work Plans.

- B. Respondent shall notify in writing, U.S. EPA and OEPA within five (5) calendar days of any delay or anticipated delay which will adversely affect the schedule in Exhibit A and the Work Plans which occurs or may occur in the performance of the Work Plans or the submission of reports required under this Consent Order. Such notification shall be in writing and shall describe fully the nature of the delay, the reasons therefor, the expected duration of the delay, the actions which will be taken to mitigate further delay, and the timetable by which the actions to mitigate the delay will be taken. Respondent shall adopt all reasonable measures to avoid or minimize any such delay.
- C. Any failure by Respondent to properly complete the Work Plans which results from circumstances beyond the control of Respondent shall not be deemed to be a violation of its obligations under this Consent Order nor shall it make Respondent liable for the stipulated penalties contained in Paragraph XVI(A)

of this Consent Order, provided it has complied with Paragraph XVI(B) above. To the extent a delay is caused by such circumstances beyond the control of Respondent, the time for performance hereunder shall be extended for a period not to exceed the period of the actual delay.

- D. Respondent shall have the burden of proving that the delay was caused by circumstances beyond the control of Respondent and that Respondent took all reasonable measures to avoid or minimize the delay. Circumstances beyond the control of Respondent shall include inter alia, acts of God, delays caused by third-parties and delays caused by governmental units which could not have been overcome by due diligence of Respondent. Circumstances beyond the control of Respondent shall not include increased cost of performance or changed economic circumstances of Respondent.
- E. The stipulated penalties set forth in Paragraph XVI(A) above shall not preclude U.S. EPA or OEPA from electing to pursue any other remedies or sanctions, including a suit to enforce the terms of this Consent Order. Said stipulated penalties shall not preclude U.S. EPA from seeking statutory penalties up to the amount authorized by law in the event of Respondent's wilful failure to comply with any requirements of this Consent Order.

#### XVII. OTHER APPLICABLE LAWS

All actions required to be taken pursuant to this Consent

Order shall be undertaken in accordance with the requirements of all applicable local, State and Federal laws and regulations. In the event there is a conflict in the application of Federal or State laws or regulations, the more stringent of the conflicting provisions or determinations, which at a minimum satisfies Federal requirements, shall apply.

#### XVIII. PARTICIPATION IN COMMUNITY RELATIONS ACTIVITIES

Respondent shall be given notice of and shall be given the opportunity to participate in public meetings, as appropriate, which may be held or sponsored by U.S. EPA or OEPA to explain activities at or concerning the Facility, including the findings of the RI/FS.

## XIX. REIMBURSEMENT OF RESPONSE COSTS

A. Provided that a full accounting and a full explanation of the costs has been provided, within thirty (30) business days of the effective date of this Consent Order, Respondent shall pay to U.S. EPA the sum of \$19,891.91 as reimbursement of U.S. EPA's post-CERCLA expenditures that are not inconsistent with the National Contingency Plan which were incurred prior to March 4, 1986. Payment to U.S. EPA shall be made to the Order of the Hazardous Substance Response Trust Fund. Payment shall be forwarded to U.S. EPA, Hazardous Substance Response Trust Fund, Post Office Box #371003M, Pittsburgh, Pennsylvania 15251. Notification of such payment shall be sent to U.S. EPA, Region

V, SWERB Branch Secretary, Attention: Ms. Isalee Coleman, Office of Regional Counsel, 5CS-16, 230 South Dearborn Street, Chicago, Illinois 60604.

Provided that a full accounting and a full explanation of the costs has been provided, within 30 days of the effective date of this Consent Order, Respondent shall pay into the Ohio Hazardous Waste Clean Up Special Account created by Ohio Revised Code Section 3734.28 the sum of \$1,942.20 as reimbursement of OEPA's post CERCLA expenditures that are not inconsistent with the National Contingency Plan which were incurred prior to March 4, 1986. Payment to OEPA shall be made payable to "Treasurer, State of Ohio" and forwarded to counsel for the Director of Environmental Protection Agency, 361 East Broad Street, Columbus, Ohio 43215-1049. Payment of these sums shall be full and complete satisfaction of all post CERCLA monetary claims of U.S. EPA and of OEPA for expenditures made prior to March 4, 1986.

B. Within thirty (30) business days of the end of each calendar year during the pendency of this Consent Order, U.S. EPA and OEPA shall provide Respondent with a full accounting and an explanation of the expenditures incurred by U.S. EPA and OEPA in connection with the Facility during the previous year, provided these costs are not inconsistent with the National Contingency Plan, were not previously reimbursed, and occurred after March 4, 1986. Within forty-five (45) business days after Respondent has

had an opportunity to audit the full accounting and explanation of the expenditures, Respondent shall reimburse U.S. EPA and OEPA for all such costs.

C. U.S. EPA and OEPA reserve the right to bring an action against the Respondent for recovery of any costs incurred by the United States and the State of Ohio in connection with any response activities conducted or to be conducted at the Facility, other than those response activities completed pursuant to this Consent Order to the satisfaction and approval of the U.S. EPA and OEPA.

### XX. DEED NOTICE, LAND USE AND CONVEYANCE OF TITLE

Respondent shall assure that no portion of the Facility will be used in any manner which would adversely affect the integrity of any containment which may remain at the Facility or monitoring system installed pursuant to this Consent Order. Respondent shall have this restriction noted in the title.

The Respondent shall assure that no conveyance of title, easement or other interest in any portion of the Facility shall be consummated without provision for continued operation and maintenance of any containment or monitoring system installed pursuant to this Consent Order. The Respondent shall notify U.S. EPA and OEPA by certified mail at least thirty (30) calendar days prior to any conveyance or of an intent to convey.

any interest in land which comprises the Facility and of the provisions made for continued maintenance of the system.

#### XXI. INDEMNIFICATION

- A. The Respondent agrees to indemnify and hold the United States Government and the State of Ohio its agencies, departments, agents, and employees, harmless from any and all claims or causes of action arising from, or on account of, negligent acts or omissions of the Respondent, its officers, employees, receivers, trustees, agents, or assigns, in carrying out the activities pursuant to this Consent Order. Respondent shall not be responsible for any negligent act or omission of U.S. EPA or OEPA, their employees, agents, or contractors. U.S. EPA and OEPA shall not be considered a party to and shall not be held liable under any contract entered into by the Respondent in carrying out the activities pursuant to this Consent Order.
- B. Any party receiving notice of a claim or action shall notify the Contractor and the other party of any such claim or action within seven (7) calendar days of the receipt of such claim or action. Each party agrees to cooperate with the other in the defense of any such claim or action which is the subject of a claim of indemnity, arising under activities pursuant to this Consent Order; provided parties asserting claims or defenses against each other are excluded from this requirement to the extent of their dispute.

## XXII. RESERVATION OF RIGHTS

- A. Notwithstanding compliance with the terms of this Consent Order, including the completion of an U.S. EPA and OEPA approved Remedial Investigation and Feasibility Study, the Respondent is not released from liability, if any, for any actions beyond the terms of this Consent Order taken by U.S. EPA or OEPA respecting the Facility. U.S. EPA and OEPA reserve the right to take any enforcement action pursuant to CERCLA and/or any available legal authority, including the right to seek injunctive relief, monetary penalties, and punitive damages for any violation of law or this Consent Order.
- B. The Respondent, U.S. EPA and OEPA expressly reserve all rights and defenses that they may have, pursuant to any available legal authority, including U.S. EPA's and OEPA's right to disapprove of work performed by the Respondent and to request that the Respondent perform tasks, not including removal or remedial actions, in addition to those detailed in the RI and FS Work Plans, as provided in this Consent Order. In the event that the Respondent declines to perform any additional and/or modified tasks, not inconsistent with the National Contingency Plan, U.S. EPA and OEPA will have the right to undertake any remedial investigation and/or feasibility study work. In addition, U.S. EPA reserves the right to undertake removal actions and/or remedial actions at any time. In either event, U.S. EPA reserves the right to seek

reimbursement from the Respondent thereafter for such costs incurred by the United States or the State of Ohio.

- C. Nothing herein is intended to release, discharge, or in any way affect any claims, causes of action or demands in law or equity against any persons, firm, partnership or corporation not a Party to this Consent Order, from any liability it may have arising out of or relating in any way to the generation, storage, treatment, handling, transportation, release or disposal of any materials or hazardous substances at, to or from the Facility. The Parties to this Consent Order expressly reserve all rights, claims, demands and causes of action they have or may have against any and all other persons and entities who are not parties to this Consent Order.
- D. Nothing herein shall waive the right of U.S. EPA to enforce this Consent Order under Section 106(b) of CERCLA, 42 U.S.C. §9606(b), or the right of OEPA to enforce this Consent Order under Chapter 3734 and 6111 of the Ohio Revised Code.
- E. Nothing herein shall waive the right of U.S. EPA to take action pursuant to Section 104, 106(a) and 107 of CERCLA, 42 U.S.C. §§9604, 9606(a) and 9607, or any other applicable law; or the right of OEPA to take action pursuant to Ohio Revised code Sections 3734.20 through 3734.36 or any other applicable law.
- F. Nothing contained herein shall preclude Respondent from conducting any lawful activity.

#### XXIII. TERMINATION AND SATISFACTION

The provisions of this Consent Order shall be deemed satisfied upon Respondent's receipt of written notice from U.S. EPA
and OEPA that Respondent has demonstrated, to the satisfaction of
U.S. EPA and OEPA that all of the terms of the Consent Order have
been completed. Such notice shall not be unreasonably delayed or
withheld.

#### XXIV. ADMISSIONS

Nothing in this Consent Order, including the Statement of Work attached hereto as Exhibit A, is intended by the parties to be, nor shall it be, an admission of facts or law, an estoppel or a waiver of defenses by Respondent for any purpose.

# XXV. PUBLIC COMMENT, SUBSEQUENT MODIFICATION, AND EFFECTIVE DATE OF THE ADMINISTRATIVE ORDER

- A. Within fifteen (15) calendar days of the date of the execution of this Consent Order, U.S. EPA shall announce the availability of this Consent Order to the public for review and comment. U.S. EPA and OEPA shall accept comments from the public for a period of thirty (30) calendar days after such announcement. At the end of the comment period, U.S. EPA and OEPA shall review all such comments and shall either:
  - a) determine that the Consent Order should be made effective in its present form, in which case, Respondent shall be so notified in writing, and the Consent Order shall become effective on the date Respondent receives such notification; or

b) determine that modification of the Consent Order is necessary, in which case Respondent will be informed as to the nature of all required changes. If Respondent agrees to the modifications, the Consent Order shall be so modified and shall become effective upon signature of the Parties.

In the event that Respondent does not agree on modifications required by U.S. EPA and OEPA as a result of public comment, this Consent Order may be withdrawn by U.S. EPA and OEPA. In such an event, U.S. EPA and Ohio EPA reserve all rights to take such actions as they deem necessary, and Respondent reserves all rights to contest such actions.

B. Except as expressly provided herein, this Consent Order may be amended only by mutual agreement of U.S. EPA, OEPA, and the Respondent. Any such amendments must be in writing and shall become effective on the date specified therein.

IT IS SO AGREED:

For Respondent

ARCO Chemical Company

a Division of Atlantic richfield Company

the all with the

Albert Risen, Jr.

(name) Vice President,

Atlantic Richfield Co.

(title) 1500 Market Street Phila., Pa 19102

(address)

FOR OHIO EPA	
By:////////////////////////////////////	SEP 2 5 1987
Ohio Environmental Protection Agency	Date
IT IS SO ORDERED:	CV
UNITED STATÉS ENVIRONMENTAL PROTECTION AGENC	CY, REGION V
By: Frank M. Povington D.R.A.	1-26-87
Vaidas V. Adamkus Regional Administrator United States Environmental Protection Agency, Region V	Date

### UNITED STATES FNVIRONMENTAL PROTECTION AGENCY REGION V

IN THE MATTER OF:	)	
	) U.S. EPA Docket	No.
ALSCO ANACONDA, THE ALSCO	)	
GNADENHUTTEN SITE	) V-W-86-C-024	ļ

#### DETERMINATION

The ARCO Chemical Company, a Division of Atlantic Richfield Company ("ARCO"), has signed an agreed order under Section 106 of the Comprehensive Environmental Response, Compensation and Liability Act to perform a Remedial Investigation and Feasibility Study ("RI/FS") at the ALSCO-ANACONDA Site in Gnadenhutten, Ohio. Pursuant to Section 104(a)(1) of the Superfund Amendments and Reauthorization Act of 1986, Public Law No. 99-49, and based upon recommendation of my staff, I have determined that ARCO is qualified to conduct this RI/FS at the ALSCO-ANACONDA Site.

Valdas V. Adamkus
Regional Administrator

Date: 1-26-87

# Alsco Anaconda The Alsco Gnadenhutten Site, Gnadenhutten, Ohio Remedial Investigation and Feasibility Study Statement of Work

#### I. PURPOSE

The purpose of this Remedial Investigation/Feasibility Study (RI/FS) is to determine the nature and extent of contamination at Alsco Anaconda, the Alsco Gnadenhutten site (Facility), develop and evaluate a number of remedial alternatives, and to identify, on the basis of technical adequacy, environmental acceptability and cost effectiveness, the optimum remedial alternative. ARCO Chemical Company (ARCO) shall furnish all material, personnel and services necessary for performing the RI/FS at the Facility, which is located on the corner of Anaconda Drive and Walnut Street in Gnadenhutten, Ohio. ARCO shall follow U.S. EPA RI/FS guidance, including amendments, and the National Contingency Plan in performing this work. A list of deliverables and the time schedule for their completion is provided in the attached Appendix.

#### II. OBJECTIVES

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The objectives of the Remedial Investigation (RI) recommended for the Facility are to:

- Determine the occurrence, if any, of groundwater and/or surface water contamination on-site as well as that which has occurred from migration of contaminants off-site; also, identify specific contaminants, their concentrations and directions of flow.
- Identify any contaminated soil and/or sediment that may be present on the site or may have migrated off site.
- Or Identify specific contaminants posing acute or chronic hazards to the public health, welfare, or the environment.
- Identify existing or potential pathways and receptors of contaminant migration from the site, which affect or may pose a threat to the public health, welfare, or the environment.

The objectives of the Feasibility Study (FS) recommended for the Facility are to:

- Characterize problems and identify general response actions for the protection of public health, welfare and the environment.
- Identify technologies and develop alternatives for remedial actions.
- Screen technologies and alternatives by utilizing technical, environmental, public health, and cost factors with a list of identified alternative remedial actions being the final output.
- Evaluate remedial alternatives for technical, public health, environmental, institutional, and cost considerations and summarize the results.

#### III. SCOPE OF WORK

The Remedial Investigation and Feasibility Study shall consist of eleven tasks:

Task 1 - Description of current situation

Task 2 - Remedial Investigation Work Plan

Task 3 - Site Investigation

Task 4 - Remedial Investigation Report

Task 5 - Feasibility Study Work Plan
Task 6 - Preliminary Remedial Technologies Identification

Task 7 - Development of Alternatives

Task 8 - Initial Screening of Alternatives

Task 9 - Evaluation of Alternatives

Task 10 - Feasibility Study Report

Task 11 - Conceptual Design Report

#### TASK 1 - DESCRIPTION OF CURRENT SITUATION

The Respondent shall describe the background information pertinent to the site and its problems and outline the purpose for remedial investigation at the site. The data gathered during any previous investigations or inspections and other relevant data shall be used.

This task should be included as the Introduction Section of the RI report.

#### A. Site Description

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The Respondent shall define the total area of the site and the general nature of the problem, including all pertinent history relative to the use of the site for waste disposal. This is to include areas of waste burning and alleged waste and drum burial.

The Respondent shall prepare summaries of the regional location, pertinent area boundary features, and site physiography, hydrology, geology, hydrogeology, and ecology.

#### B. Nature and Extent of Problem

The Respondent shall prepare a summary of the actual and potential onsite and off-site health and environmental effects. This may include, but is not limited to: the types, physical states, and amounts of the wastes on site, focusing on both organic and inorganic contaminants; the existence and conditions of lagoons and disposal areas; potential biologic and sediments contamination in the Tuscarawas River; contaminated releases such as leachate or runoff; socioeconomics; affected media and pathways of exposure; and any potential human exposure. Emphasis shall be placed on describing the threat or potential threat to public health and the environment.

#### C. History of Response Actions

The Respondent shall prepare a summary of any previous response actions conducted by either local, State, Federal, or private parties, including the site inspection and other technical reports, and their results. This summary shall address any enforcement activities undertaken to compel private cleanup. A list of reference documents and their location shall be included. The scope of the RI shall be developed to address the problems and questions that have been identified through previous work at the site.

#### D. <u>Site Map</u>

The Respondent shall prepare a site topographic map showing all wetlands, floodplains, water features, drainage patterns, tanks, buildings, utilities, paved areas, easements, rights-of-way, and other features. The site map and all topographical surveys shall be prepared with two (2) foot contour intervals and be of sufficient detail and accuracy to locate and report all existing and future work performed at the site.

#### E. Additional Data

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The Respondent shall search, collect, and compile any additional site information. Additional maps, historical photographs, soils, ground-water, and surface water data and reports shall be collected. Sources of additional information include the Ohio Geological Survey, Soil Conservation Service (SCS), local health department, and local well drillers.

#### TASK 2 - REMEDIAL INVESTIGATION WORK PLAN

The Respondent shall review this Statement of Work in its entirety and then prepare a detailed work plan entitled Addendum II to Revision I of the RI Work Plan. The work plan shall include a detailed technical approach, personnel requirements, schedule for the proposed activities and shall be prepared in accordance with the U.S. EPA document EPA/540/G-85/002, "Guidance on Remedial Investigations under CERCLA". The draft work plan shall be submitted to the United States Environmental Protection Agency (U.S. EPA) and the Ohio Environmental Protection Agency (OEPA) for review and comment for approval in accordance with the procedures set forth in the Consent Order. After the Agencies have completed their review, the Respondent, the Consultant and their appropriate staff may meet with U.S. EPA and OEPA to discuss the draft document. The revised work plan must be approved by U.S. EPA and OEPA prior to initiating any tasks.

In addition to the activities outlined in Task 3, development of the Work Plan shall include:

#### A. Quality Assurance Project Plan

A site specific QAPP shall be prepared that conforms to the specifications in the User's Guide to the U.S. EPA's Interim Guidelines and Specifications for Preparing Quality Assurance Plans (QAMS-005/80) and U.S. EPA, Region V's Guidance for Preparation of Quality Assurance Project Plans. The draft plan shall be submitted to U.S. EPA and OEPA for review and approval prior to initial sample collection. Incorporation of review comments into the QAPP and final U.S. EPA approval shall be necessary prior to initiating sampling. U.S. EPA reserves the right to refuse usage of a laboratory deemed incapable of performing the necessary analyses. The U.S. EPA Quality Assurance Office shall determine if the laboratory is capable of performing the analyses, possibly through performance evaluation sample results and/or a laboratory inspection.

The plan shall, at a minimum, include:

- Project organization and data management
- ° Sampling objectives
- ° Sampling protocol and equipment
- Sample chain of custody
- ° Field equipment calibration/maintenance
- Decontamination procedures
- Quality control procedures (field sample duplicates and blanks)
- Quality assurance audits
- Nonconformance/corrective action
- ° Site specific sampling plan
- Methods of analysis (laboratory procedures)
- Numerical calculations and peer review

#### B. Site Health and Safety Plan

The Respondent shall prepare a plan designed to protect the health and safety of personnel involved in the RI. The plan must also address health and safety procedures for site visitors and local residents. The plan shall consider:

- Section III(c)(6) of CERCLA
- \* U.S. EPA Order 1440.2 -- Health and Safety Requirements for Employees Engaged in Field Activities
- ° U.S. EPA Occupation Health and Safety Manual
- U.S. EPA Interim Standard Operating Safety Procedures (September, 1982)
- Site conditions

#### C. Revise Work Plan

The Respondent shall modify the RI Work Plan based on the U.S. EPA and OEPA review comments.

#### TASK 3 - SITE INVESTIGATION

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The objectives of the site investigation are to identify the specific contaminants and locations of concern. Parameter identification shall be accomplished by following U.S. EPA approved Contract Laboratory Program procedures.

#### A. Impoundment and Sludge Pit Characterizations

The Respondent shall evaluate previously generated data and, from that analysis, propose a plan for further sampling of the impoundment, sludge pit and underlying soils. Specific attention shall be given to the appropriateness of composite samples.

The sludge and soil samples shall be analyzed for pH, total cyanide, fluoride, nitrate, aluminum, arsenic, barium, cadmium, hexavalent chromium, total chromium, copper, iron, lead, manganese, mercury, selenium, silver and zinc. Selected sludge and underlying soil samples from the south lagoon shall be analyzed for the Contract Laboratory Program List of organic chemicals. The Extraction Procedure (E.P.) Toxicity Test method shall also be performed.

Samples shall be analyzed in accordance with Section F of Task 3 of this Statement of Work.

#### B. <u>Tuscarawas River Sediments Characterization</u>

Sediment samples from the Tuscarawas River shall be collected adjacent to the site and at several points downstream of the site. Prior to collecting samples, river flow shall be analyzed to determine the most likely points of deposition. Upstream sample(s) shall also be collected to determine background conditions.

Samples shall be analyzed for polychlorinated biphenyls (PCBs), total chromium and hexavalent chromium in accordance with Section F of Task 3 of this Statement of Work.

#### C. Swamp Deposition Characterization

Utilizing the results of earlier sample collections, the Respondent shall develop a plan to more accurately determine the extent of PCBs, total chromium and hexavalent chromium contamination in the swamp area located on the west end of the plant-site along the Tuscarawas River. The sludge and soil samples shall be analyzed for pH, total cyanide, fluoride, nitrate, aluminum, arsenic, barium, cadmium, hexavalent chromium, total chromium, copper, iron, lead, manganese, mercury, selenium, silver and zinc. The Extraction Procedure (E.P.) Toxicity Test method shall also be performed.

Sample analysis shall be conducted in accordance with Section F of Task 3 of this Statement of Work.

#### D. Groundwater Sampling

Each monitoring well shall be sampled at two distinct depths. The Respondent shall analyze the results of earlier sampling, site geological conditions and sediment conditions to determine the sampling depths most likely to reveal groundwater contamination, if present.

Groundwater samples shall be analyzed for the following: pH, specific conductance, temperature, total cyanide, fluoride, nitrate, aluminum, arsenic, barium, cadmium, hexavalent chromium, total chromium, copper, iron, lead, manganese, mercury, selenium, silver, zinc. The uppermost sample from each well shall be analyzed for the Contract Laboratory Program List of organic chemicals. Sample analysis shall be conducted in accordance with Section F of Task 3 of this Statement of Work. Those samples to be analyzed for dissolved metals shall be field filtered using a 0.45 micron filter.

#### E. Air Monitoring

The Respondent shall evaluate the possibility of atmospheric contamination. The evaluation shall address the tendency of substances (identified through Waste Characterization) to enter the atmosphere, local wind patterns, and the degree of hazard.

#### F. Sample Analysis

Sampling and analysis must conform to guidelines outlined in the Users Guide to the U.S. EPA Contract Laboratory Program prepared by the Sample Management Office of CLP and published in 1982.

#### TASK 4 - REMEDIAL INVESTIGATION REPORT

The Respondent shall prepare an analysis and summary of all Remedial Investigation activities and their results. This report shall be prepared in accordance with the procedures set forth in the Consent Order. This report shall be prepared in accordance with the U.S. EPA document entitled "Guidance on Remedial Investigations under CERCLA" (EPA/540/G-85/002). The objective of this task is to determine whether to proceed with the feasibility study and/or conduct additional remedial investigations.

#### A. <u>Endangerment Assessment</u>

The Respondent shall evaluate all data collected during the Remedial Investigation to determine whether or not the substances found at the site present a hazard or potential hazard to the environment or public health and the data shall be reviewed to formulate conclusions regarding the hazard potential at the Facility. This evaluation shall be performed in accordance with the U.S. EPA Handbook on Preparation of Endangerment Assessments. The Respondent shall include the endangerment assessment as a separate chapter in the draft RI report.

#### B. Prepare Draft Remedial Investigation Report

The Respondent shall prepare the draft RI report utilizing all data collected during the RI. The results and data shall be organized and presented logically so that the relationship between site investigations for each media are apparent. The report shall include a list of potential general response actions that should be evaluated in the feasibility study. The no action alternative shall be included as a baseline.

#### C. Draft Report Review Meeting

The Respondent, the Consultant and their necessary staff shall be prepared to discuss the draft report with the U.S. EPA and OEPA. Prior to these discussions, the Agencies will have provided the Respondent with their specific review comments on the draft report.

#### D. Prepare Final Remedial Investigation Report

The Respondent shall prepare the final report based on the U.S. EPA's and OEPA's review comments. A public meeting may be held to present the conclusions of the Remedial Investigation. The Respondent and Consultant shall be available to answer any technical questions.

#### TASK 5 - FEASIBILITY STUDY WORK PLAN

Concurrent with submittal of the draft RI Report, the Respondent shall submit a detailed work plan for the Feasibility Study (FS) that is consistent with Tasks 6 through 11 of this Statement of Work. The Work Plan must also be consistent with the U.S. EPA document EPA/540/G-85/003, "Guidance on Feasibility Studies under CERCLA." The work plan shall include the technical approach and

schedule for the proposed Feasibility Study activities. The draft work plan shall be submitted to U.S. EPA and OEPA for review and comment for approval in accordance with the procedures set forth in the Consent Order. After the Agencies have completed their review, the Respondent, the Consultant, and their appropriate staff may meet with U.S. EPA and OEPA to discuss the draft document. The revised work plan must be approved by U.S. EPA and OEPA prior to initiating any tasks.

#### TASK 6 - PRELIMINARY REMEDIAL TECHNOLOGIES IDENTIFICATION

Based on the site-specific problems identified in the RI, the Respondent shall develop a master list of potentially feasible technologies in accordance with the U.S. EPA document entitled "Guidance on Feasibility Studies under CERCLA" (EPA/540/G-85/003) and the National Contingency Plan. These technologies shall include both on-site and off-site remedies, depending on site problems. The master list shall be screened based on site conditions, waste characteristics, and technical requirements, to eliminate or modify those technologies that may prove extremely difficult to implement, will require unreasonable time periods, or will rely on insufficiently developed technology. Criteria considered and technologies eliminated shall be adequately documented.

Technologies will be assessed on the basis of acceptable engineering practices. The specific factors to be evaluated include:

Reliability

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- Established technology
- Suitability to control the problem
- Health and safety risks to construction and operational personnel
- Constructability and operability within site conditions
- Maintainability and sensitivity to offsite concerns
- ° Off-site transportation and disposal requirements

The draft Technology Assessment chapter of the Feasibility Study Report shall be prepared to both document the results of the literature search and technology assessment and present the conclusions regarding the applicability of various technologies. The draft chapter shall be submitted to U.S. EPA and OEPA for review and comment in accordance with the procedures set forth in the Consent Order.

#### TASK 7 - DEVELOPMENT OF ALTERNATIVES

Based on established response objectives, the results of the RI, and consideration of preliminary remedial technologies(Task 6), the Respondent shall develop a limited number of alternatives for source control or off-site remedial actions, or both.

#### A. Establishment of Remedial Response Objectives

The Respondent shall establish site-specific objectives for the response. These objectives shall be based on public health and environmental concerns, results of the remedial investigation, Section 300.68 of the National Contingency Plan (NCP), U.S. EPA interim guidance, and requirements of any other applicable U.S. EPA, Federal, and State environmental standards, guidance, and advisories as defined under U.S. EPA's CERCLA compliance policy. Objectives for source control shall be developed to prevent or significantly minimize migration of contamination from the site. Objectives for management of migration shall be developed to eliminate or minimize impacts of contamination that has migrated or may migrate in the future from the site. Preliminary cleanup objectives shall be developed in consultation with the U.S. EPA and the OEPA and shall be subject to their comment and modification.

#### B. Identification of Remedial Alternatives

The Respondent shall develop alternatives that incorporate remedial technologies (from Task 6), response objectives, and other appropriate considerations into a comprehensive, site-specific approach. Alternatives developed shall include the following (as appropriate):

- Alternatives for off-site treatment or disposal.
- Alternatives which <u>attain</u> applicable and/or relevant public health or environmental standards.
- Alternatives which exceed applicable and/or relevant public health or environmental standards.
- Alternatives which do not attain applicable and/or relevant public health or environmental standards, but will reduce the likelihood of present or future threat from the hazardous substances present on site. This must include an alternative which closely approaches the level of protection provided by the applicable or relevant standards.
- ° No action.

There may be overlap among the alternatives developed. Further, alternatives outside of these categories may also be developed, such as noncleanup alternatives (e.g., alternative water supply, relocation, etc.). The alternatives shall be developed in close consultation with U.S. EPA and OEPA and subject to their concurrence. Document the rationale for excluding any technologies identified in Task 6 in the development of alternatives.

#### TASK 8 - INITIAL SCREENING OF ALTERNATIVES

The alternatives developed in Task 7 shall be screened by the Respondent to eliminate those that are clearly infeasible or inappropriate prior to undertaking detailed evaluations of the remaining alternatives. The criteria considered and alternatives eliminated shall be adequately documented in the FS report.

#### A. Considerations to be Used in Initial Screening

Three broad considerations must be used as a basis for the initial screening: public health, the environment and cost. More specifically, the following factors must be considered:

- 1. Environmental Protection Only those alternatives-that satisfy the response objectives and contribute substantially to the protection of public health, welfare, or the environment shall be considered further. Source control alternatives shall achieve adequate control of source materials. Management of migration alternatives shall minimize or mitigate the threat of harm to public health, welfare, or the environment.
- 2. Environmental Effects Alternatives posing significant adverse environmental effects shall be excluded. The adverse impacts of the alternatives, the adequacy of source control, and the acceptable mitigation of danger to public health and welfare and the environment shall be identified.
- 3. Technical Feasibility Technologies that may prove extremely difficult to implement, will not achieve the remedial objectives in a reasonable time period, or will rely upon unproven technology shall be modified or eliminated. The alternative must be technically feasible regarding site location and conditions. It also must be applicable to the project needs, and must be a reliable method of solving the identified problem.
- 4. Cost An alternative whose cost far exceeds that of other alternatives will usually be eliminated unless other significant benefits may also be realized. Total costs shall include the cost of implementing the alternatives and the cost of operation and maintenance.

#### TASK 9 - EVALUATION OF ALTERNATIVES

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The Respondent shall evaluate the effectiveness of alternative remedies that pass through the initial screening in Task 8. Alternative evaluation shall be preceded by detailed development of the remaining alternatives, as follows:

#### A. <u>Technical Analysis</u>

Technical Analysis of alternatives shall, as a minimum:

- 1. Describe appropriate treatment, storage, and disposal technologies.
- 2. Discuss how the alternative does (or does not) comply with specific requirements of other applicable environmental programs. When an alternative does not comply, discuss how the alternative prevents or minimizes the migration of wastes. Also, discuss the public health and environmental impacts and describe special design needs that could be implemented to achieve compliance.
- 3. Outline operation, maintenance, and monitoring requirements of the alternatives.
- 4. Identify and review potential off-site Resource Conservation and Recovery Act (RCRA) and U.S. EPA approved disposal facilities to ensure compliance with applicable RCRA and other U.S. EPA and OEPA environmental program requirements, both current and proposed.
- 5. Identify temporary storage requirements, off-site disposal needs, and transportation plans.
- 6. Describe whether the alternative results in permanent treatment or destruction of the wastes, and, if not, the potential for future release to the environment.
- 7. Outline safety requirements for remedial implementation (including both on-site and off-site health and safety considerations).
- 8. Describe how the alternative could be phased into individual operable units. The description should include a discussion of how various operable units of the total remedy could be implemented individually or in groups, resulting in a significant improvement to the environment or savings in cost.
- 9. Describe how the alternative could be segmented into areas to allow implementation in differing phases.
- 10. Describe any special engineering requirements or site preparation considerations.

#### B. Environmental Analysis

The Respondent shall perform an Environmental Assessment of each alternative. The Environmental Assessment shall focus on the site problems

and pathways of contaminant movement specifically addressed by the alternative. The Environmental Assessment for each alternative shall include, at a minimum, an evaluation of beneficial and adverse effects of the alternative, an analysis of measures to mitigate adverse effects, an assessment for adequacy of proposed source control measures, an evaluation of the effectiveness of offsite control measures, and an outline of institutional and legal constraints. The no-action alternative shall be fully evaluated to describe the current site situation and anticipated environmental conditions if no actions are taken. The no-action alternative shall serve as the baseline for the analysis.

#### C. Public Health Analysis

Each alternative shall be assessed in terms of the extent to which it mitigates long-term exposure to any residual contamination and protects public health both during and after completion of the remedial action. The assessment shall describe the levels of contaminants on-site, potential exposure routes, and all potentially affected populations. The public health impacts of "no action" shall be described both in terms of short-term effects (e.g., lagoon failure) and long-term effects resulting from continued exposure to hazardous substances. Each remedial alternative shall be evaluated to determine the level of exposure to contaminants and the resulting reduction in contaminant levels with time. The relative reduction in public health impacts for each alternative shall be compared to the no-action level. For management of migration measures, the relative reduction in impact shall be determined by comparing residual levels of each alternative with existing criteria, standards, or guidelines acceptable to U.S. EPA and OEPA. For source control measures or when criteria, standards, or guidelines are not available, the comparison shall be based on the relative effectiveness of technologies. The no-action alternative shall serve as the baseline for the analysis.

#### D. <u>Institutional Analysis</u>

Each alternative shall be evaluated based on relevant institutional needs. Specifically, regulatory and permit requirements, community relations needs and the level of agency coordination necessary shall be assessed.

#### E. Cost Analysis

The Respondent shall evaluate the cost of each feasible remedial action alternative (and for each phase or segment of the alternative). The cost analysis shall include the total cost of implementing the alternative and the annual operating and maintenance costs. Both monetary costs and associated non-monetary costs shall be included. A distribution of cost over time shall be provided.

#### F. Present Worth Analysis

After completion of the cost estimate, a present worth analysis shall be conducted.

#### G. Evaluation of Cost-Effective Alternatives

Alternatives shall be compared using technical, environmental, and economic criteria. At a minimum, the following areas shall be used to compare alternatives:

- 1. Health Information For the no-action alternative, U.S. EPA prefers a quantitative statement including a range estimate of maximum individual risks. Where quantification is not possible, a qualitative analysis may suffice. For management of migration measures, the Respondent shall present a quantitative risk assessment including a range estimate of maximum individual risks.
- 2. Environmental Effects Only the most important effects or impacts shall be summarized. Reference can be made to supplemental information arrayed in a separate table, if necessary.
- 3. Technical Aspects of the Remedial Alternatives The technical aspects of each remedial alternative relative to the others shall be clearly delineated. Such information generally will be based on the professional opinion of the Respondent or their Consultant regarding the site and the technologies comprising the remedial alternative.

After screening the remedial action alternatives for further evaluation, the Respondent shall evaluate the field investigation studies completed during the remedial investigation. They shall identify any additional engineering studies that will be required during design to fully evaluate the cost, constructibility, applicability or reliability of the alternative.

- 4. Information on the Extent to Which Remedial Alternatives Meet the Technical Requirements and Environmental Standards of Applicable Environmental Regulations This information shall be arranged so that differences in how remedial alternatives satisfy such standards are readily apparent. The general types of standards that may be applicable at the site include:
  - a. RCRA design and operating standards;
  - b. Drinking water standards and criteria;
  - c. Water quality standards and criteria; and
  - d. Air emissions standards.
- 5. Information on Community Effects The types of information that shall be provided are the extent to which implementation of a remedial alternative disrupts the community (e.g., traffic, temporary health risks, and relocation).

- 6. Present Worth of Total Costs The net present value of capital and operation and maintenance costs must be presented.
- 7. Other Factors This category of information would include such things as institutional factors that may inhibit implementing a remedial alternative and any other site-specific factors identified in the course of the detailed analysis that may influence which alternative is eventually selected.

#### TASK 10 - FEASIBILITY STUDY REPORT

A report presenting the results of Tasks 6 through 9 shall be prepared and submitted by the Respondent to U.S. EPA and OEPA for their review. This report shall be prepared in accordance with the procedures set forth in the Consent Order. This report must follow the U.S. EPA document "Guidelines on Feasibility Studies under CERCLA" and any other applicable guidance. (Note: U.S. EPA and OEPA retain authority for the final selection of the remedial alternative to be implemented at the site).

#### A. Draft Report Review Meeting

The Respondent, the Consultant and their necessary staff shall be available to discuss the Draft Feasibility Study Report with U.S. EPA and OEPA. Prior to these discussions, the Agencies will have provided the Respondent with their specific review comments.

#### B. Prepare Final Draft Feasibility Study Report

The Respondent shall prepare the final Draft Feasibility Study Report based on the U.S. EPA's and OEPA's review comments prior to making the document available to the public.

#### C. Community/Public Meetings

A community/public meeting shall be held following publication of the final Draft Feasibility Study Report. The purpose of this meeting will be to inform citizens of the RI/FS results and to obtain their comments and concerns. The Respondent and the Consultant shall be available to answer any technical questions. There shall be a minimum three week public comment period following publication of the final Draft Feasibility Study Report.

Following the public review and comment period, U.S. EPA and OEPA shall notify the Respondents of any necessary modifications to the final Draft Feasibility Study Report in order to produce the Final Feasibility Study Report.

#### TASK 11 - CONCEPTUAL DESIGN REPORT

#### 1. Preparation of Conceptual Design Report

The Respondent shall prepare a draft report of the conceptual design in accordance with the procedures set forth in the Consent Order. The Respondent, the Consultant, and their staff shall be available to discuss the draft report with the U.S. EPA and OEPA. Prior to these discussions the Agencies shall have provided the Respondent with their review comments. The Respondent shall prepare a final report based on the U.S. EPA's and OEPA's review comments.

The following conceptual design elements will be developed as required for the remedial action selected:

- A conceptual plan view drawing of the overall site, showing general locations for project actions and facilities.
- Conceptual layouts (plan and cross sectional views where required) for the individual facilities, other items to be installed, or actions to be implemented.
- Conceptual design criteria and rationale.
- A description of types of equipment required, including approximate capacity, size and materials of construction.
- Process flow sheets and a description of the process.
- A description of structural concepts for facilities.
- Utility requirements and rationale.
- An evaluation of potential construction problems, associated risks, and the proposed solutions.
- Right-of-way requirements.
- A description of technical requirements for environmental mitigation measures.
- Additional engineering data required to proceed with design.
- Construction permit requirements.
- Closure and long-term monitoring requirements and rationale.
- Performance standards to define the levels of cleanup required to complete the remedial action.
- Comparative implementation cost estimate.

- $^{\rm o}$  Comparative annual 0&M cost estimates and duration of operating expenses.
- Preliminary project schedule.

#### 2. Supplementary Activities

To supplement the conceptual design and to assist in the design and implementation of the recommended remedial action, additional work may be required. Examples of possible additional activities are:

- Review the community relations and environmental impacts of the remedial actions.
- Prepare a project schedule.
- ° Review environmental permit and institutional requirements.

#### APPENDIX - DELIVERABLES/TIME SCHEDULE

The following deliverables shall be provided for the tasks outlined in the RI/FS Statement of Work according to the following time schedule:

RI/FS TASK	DELIVERABLES	TIME SCHEDULE
° Task 2	- Draft RI Work Plan	Within 20 business days of effective date of signing of Consent Order.
° Task 2	- Final RI Work Plan	Approval based on procedures detailed in Consent Order.
° Task 4	- Draft RI Report	Within 180 calendar days of approval of RI Work Plan.
° Task 4	- Final RI Report	Approval based on procedures detailed in Consent Order.
° Task 5	- Draft FS Work Plan	Within 180 calendar days of approval of RI Work Plan.
° Task 5	- Final FS Work Plan	Approval based on procedures detailed in Consent Order.
° Task 6	- Draft Technology Assessment Chapter of FS Report	Within 45 calendar days of approval of FS Work Plan.
° Task 10	- Draft FS Report	Within 180 calendar days of approval of FS Work Plan.
° Task 10	- Final FS Report	Approval based on procedures detailed in Consent Order.
° Task 11	- Draft Conceptual Design Report	Within 45 calendar days of approval of Final FS Report.
° Task 11	- Final Conceptual Design Report	Approval based on procedures detailed in Consent Order.

#### Attachment I

## PROPOSED PLAN ALSCO ANACONDA SITE GNADENHUTTEN, OHIO

#### Statement of Purpose

The United States Environmental Protection Agency (U.S. EPA) announces the completion of the Focused Feasibility Study (FFS) report for the source material (contaminated sludge and soil) operable unit at the Alsco Anaconda site in Gnadenhutten, Ohio. The purpose of this Proposed Plan is to describe briefly the alternatives analyzed in FFS report, identify the preliminary decision of a preferred alternative and the reasons for this preference, and solicit public review and comment on all alternatives detailed in the FFS.

The Proposed Plan satisfies requirements of Section 117(a) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCIA) by providing an opportunity for public participation prior to the final selection of the remedial alternative. This Plan will highlight key information from the Remedial Investigation (RI) Report and the FFS report. The RI report dated January 1989 and the FFS report dated June 1989 are available for public review at the repository listed below:

Gnadenhutten Public Library 160 North Walnut Street Box 216 Gnadenhutten, OH 44629 (614) 254-9224

These documents are the primary sources of information about the site and should be referred to for detailed information (RI) and the remedial alternatives analyzed (FFS). The Proposed Plan represents U.S. EPA's preferred alternative based on available information, but is not a final decision. Public input on all alternatives, and on the information that supports the alternatives, is an important contribution to the remedial decision-making process. Comments can modify the position of the Agency on the preferred alternative; consistent with Section 117 of CERCIA, the final remedial action plan can be different from the preferred alternative.

#### Site History and Description

The 4.8 acre Alsco Anaconda site, part of the former ARCO Alsco plant, is located within the Gnadenhutten village limits along the flood plain of the Tuscarawas River (See Figure 1). The Alsco Anaconda factory has manufactured aluminum products since 1948 when it was established by Harvard Industries. The plant was acquired by the Anaconda Company in August 1971. The Anaconda Company was acquired by the ARCO Chemical Company, a division of the Atlantic Richfield Company (ARCO), in January 1977.

#### ATTACHMENT II

#### AGENDA FOR MEETING

Date: July 25, 1989

Time: 10:00 A.M.

Location: U.S. EPA

Region V

230 South Dearborn Chicago, Illinois

#### Topics for discussion:

- \* Background Information on the Site
- \* Response Activities to Date
- \* Liability of Responsible Parties Under CERCIA
- \* Explanation of Expected PRP Response Activities
- \* Proposed Plan
- \* Structure of Consent Decree Negotiations

#### Attachment III

### DRAFT

# IN THE UNITED STATES DISTRICT COURT FOR THE NORTHERN DISTRICT OF OHIO EASTERN DIVISION

UNITED STATES OF AMERICA,	)
Plaintiff,	)
v.	) CIVIL ACTION NO.
ARCO Chemical Company, A Division of the Atlantic Richfield Company.	) ) )
Defendant.	) )

CONSENT DECREE

I.

#### BACKGROUND

Whereas, the United States Environmental Protection Agency ("U.S. EPA"), pursuant to Section 105 of the Comprehensive
Environmental Response, Compensation, and Liability Act of 1980
("CERCLA"), 42 U.S.C. 9605, placed the Alsco Anaconda site in
Gnadenhutten, Ohio (the "Facility" as specifically defined in
Paragraph of this Consent Decree) on the National Priorities
List, which is set forth in 40 CFR Part 300, Appendix B, by
publication in the Federal Register on June 10, 1986, 51 Fed.
Reg. 21069 - (1986). The facility has been divided into two
operable units as defined by 40 CFR 300.6, and as used in 40 CFR
300.68: (1) the source material operable unit and (2) the
groundwater operable unit. This Consent Decree addresses only
those actions which U.S. EPA and ARCO Chemical Company ("ARCO")
agree to take addressing the source material operable unit.
Further work may be required for areas at or affected by the